



## **Solar Energy: The Best Idea Under the Sun**

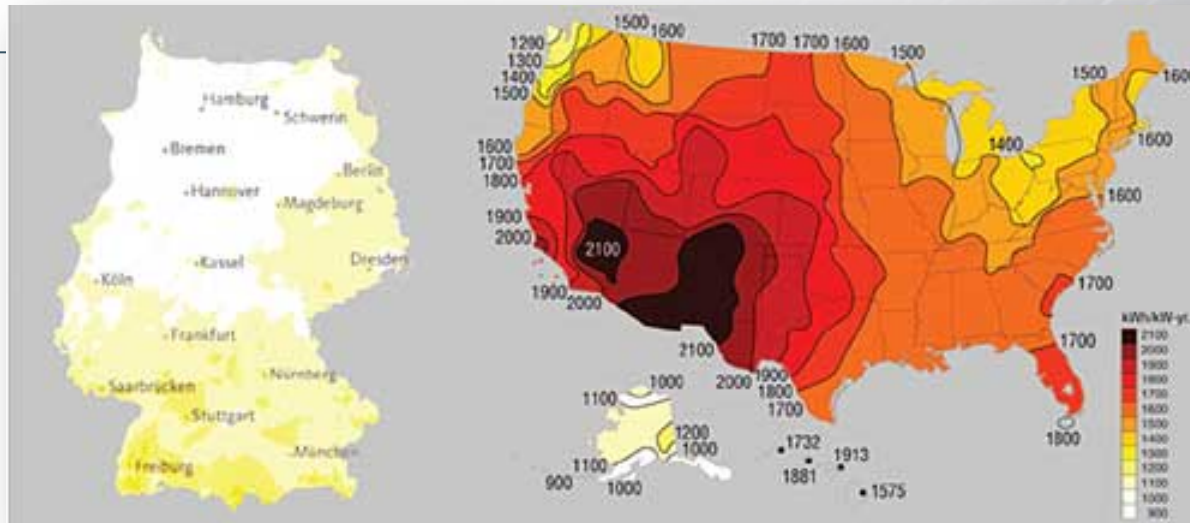
**Michael Shore, CEO**

**michael @ flsenergy.com**

**[www.flsenergy.com](http://www.flsenergy.com)**

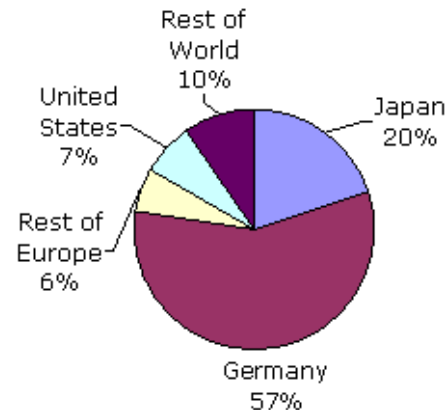


# Solar Light Levels



## Solar PV Market

**PV Installations in 2005  
Regional Megawatt Breakdown**



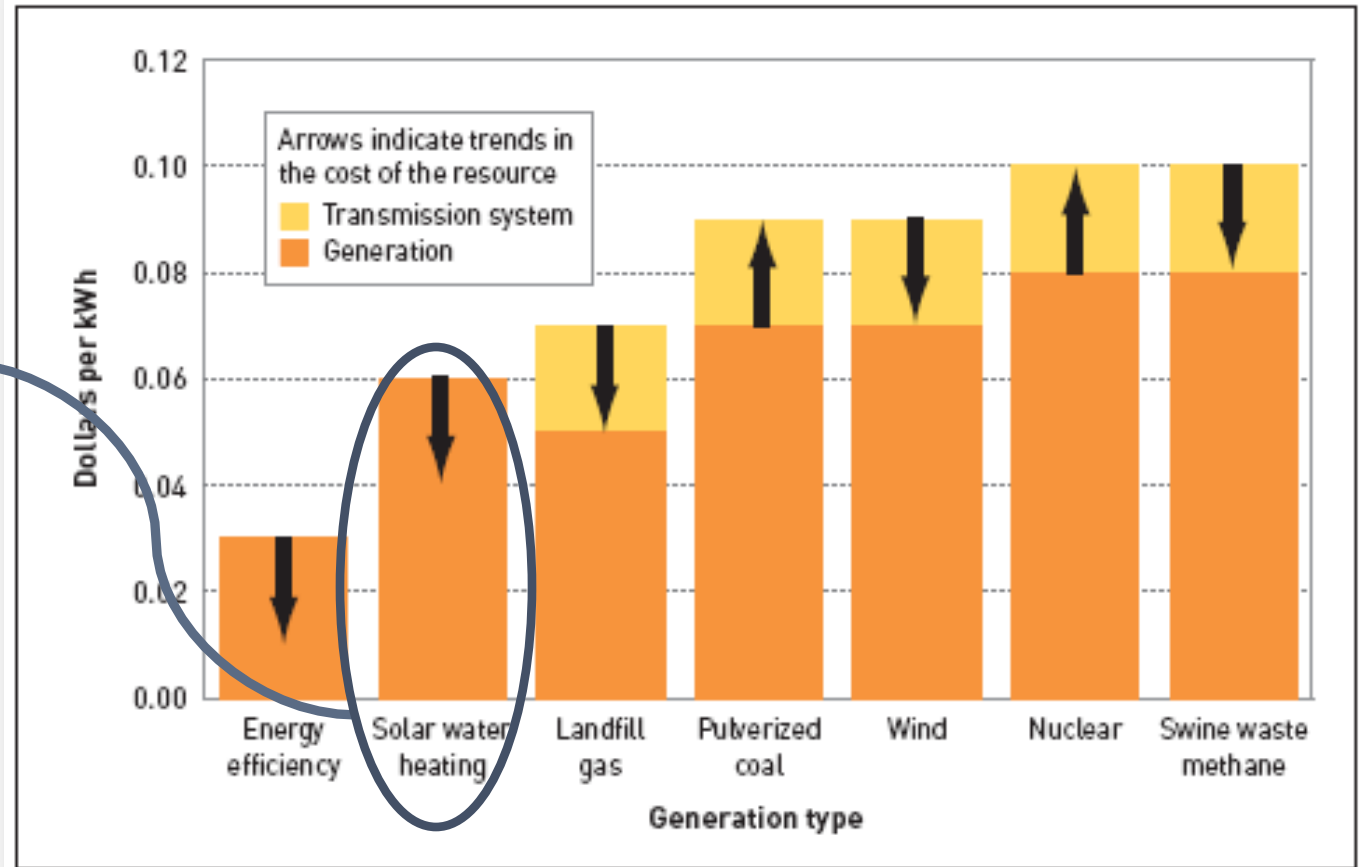
**TOTAL: 1,460 MW**

Source: Solarbuzz LLC

# Market Opportunity

- Hotels
- Military Bases
- Dormitories
- Hospitals
- Restaurants
- Car Washes
- Laundries
- Health Clubs
- Fire stations

Cost comparison of electricity technologies



## ■ Solar Energy Generation Company

- Design & Installation
- Specialize in large commercial projects
- Finance

## ■ Our Mission

- Making Solar Mainstream

**BUSINESS**  
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**B**  
SUNDAY  
November 4, 2007

# Solar savings



JOHN FLETCHER [jfletcher@citizen-times.com](mailto:jfletcher@citizen-times.com)  
From left, Dale Freudenberger, Hardy LeGwin and Michael Shore of FLS Energy hold up a voltaic panel at the company's headquarters in Black Mountain.

### Energy from the sun can lead to cheaper utility bills

By Dale Neal  
[dneal@citizen-times.com](mailto:dneal@citizen-times.com)

**Black Mountain** — For businesses looking to improve their bottom line, one solution comes up every day with the sun.

"Once you have your system built, you have free energy falling from the sky," explained Michael Shore of Forward Looking Sustainable Energy, a Black Mountain company that specializes in solar hot water systems.

FLS Energy has just completed the design and installation of one of the nation's largest solar hot-water systems for a new hotel in Greensboro. The Proximity Hotel boasts 100 solar panels on its roof that will heat about 5,000 gallons of water daily, saving \$14,000 annually in utility bills.

**Green destination**  
"Why pump oil from somewhere in Texas when the sun is here?" said Dennis Quaintance, the Proximity developer who also is working on several other projects in Piedmont North Carolina.

Quaintance first asked to have the system hidden on the hotel roof, but he then decided to make the panels visible to showcase the building's green design. The New York Times recently cited the Proximity as a top destination for environmentally conscious travelers.

The FLS energy system also allowed the Proximity to earn Leadership in Energy and Environmental Design Gold rating from the U.S. Green Building Council.

"We founded Forward Looking Sustainable Energy to enable businesses and families to save money through clean energy solutions," said Hardy LeGwin, company president. "The Proximity is a perfect example of how we can do things in harmony with the Earth and still meet human needs for warmth, sanitation and comfort."

FLS Energy is working closer to home with homeowners, businesses and organizations in Western North Carolina to make solar hot-water mainstream. The company has targeted hospitals, restaurants, laundrettes and dormitories as clients likely to be eager for solar hot water.



The Proximity Hotel boasts one of the nation's largest solar hot water systems with 100 panels on the roof designed and installed by FLS Energy of Black Mountain.



# State of the Art Technologies

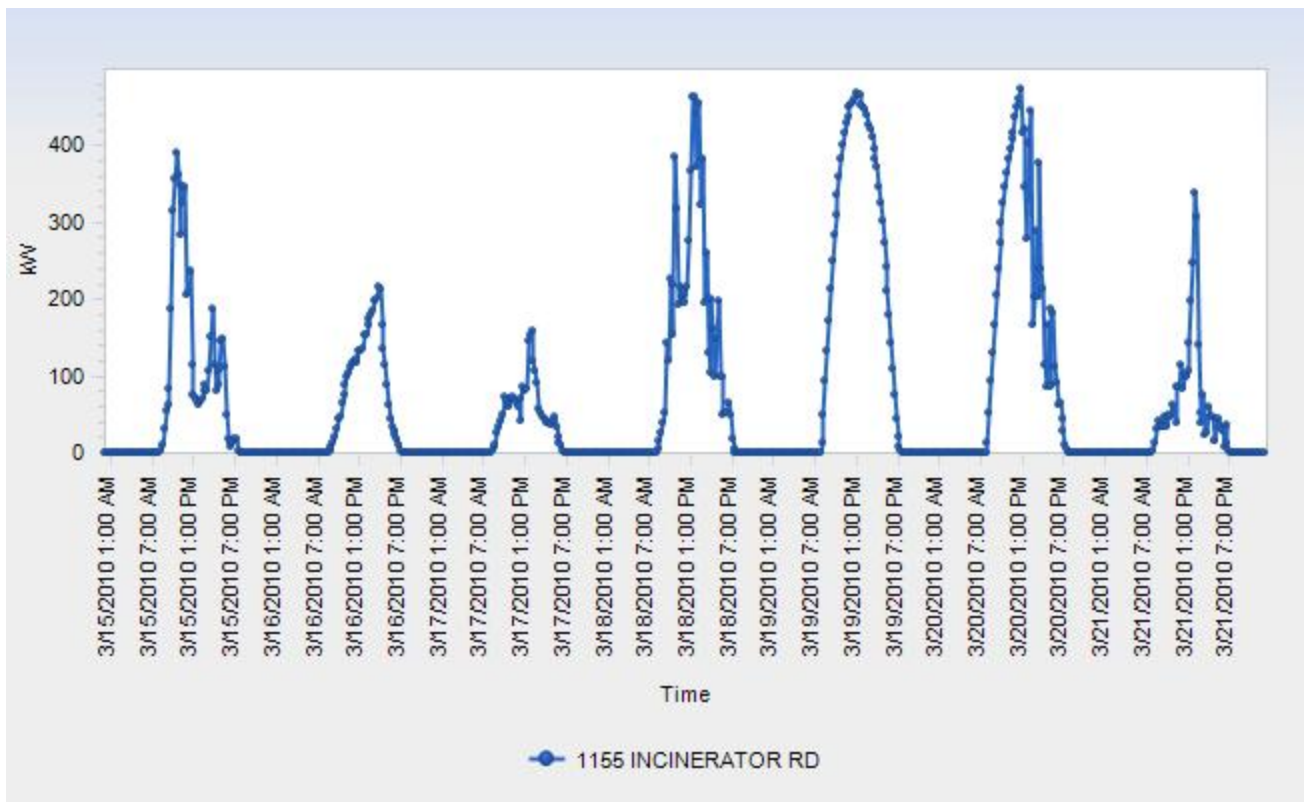


**Solar Thermal  
(Hot Water)**



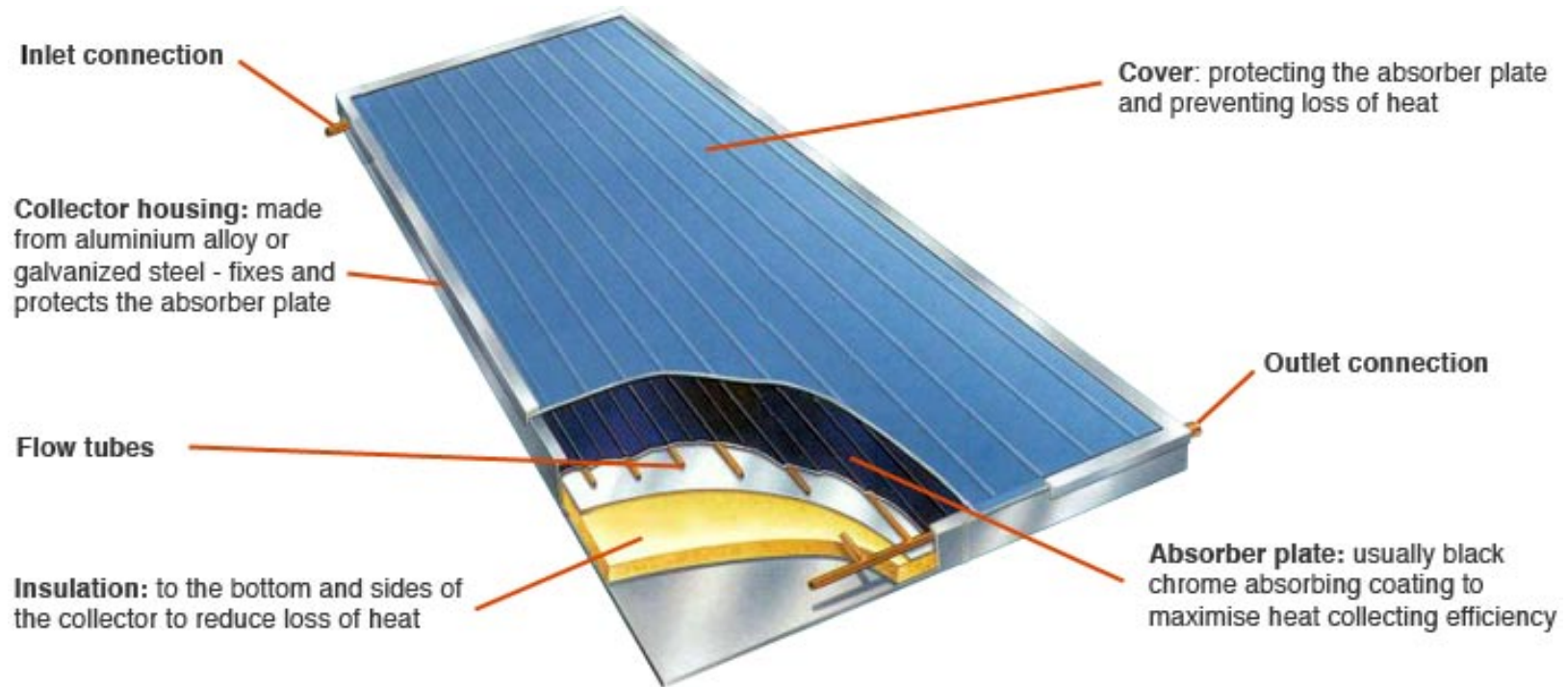
**Photovoltaic  
(Electric “PV”)**



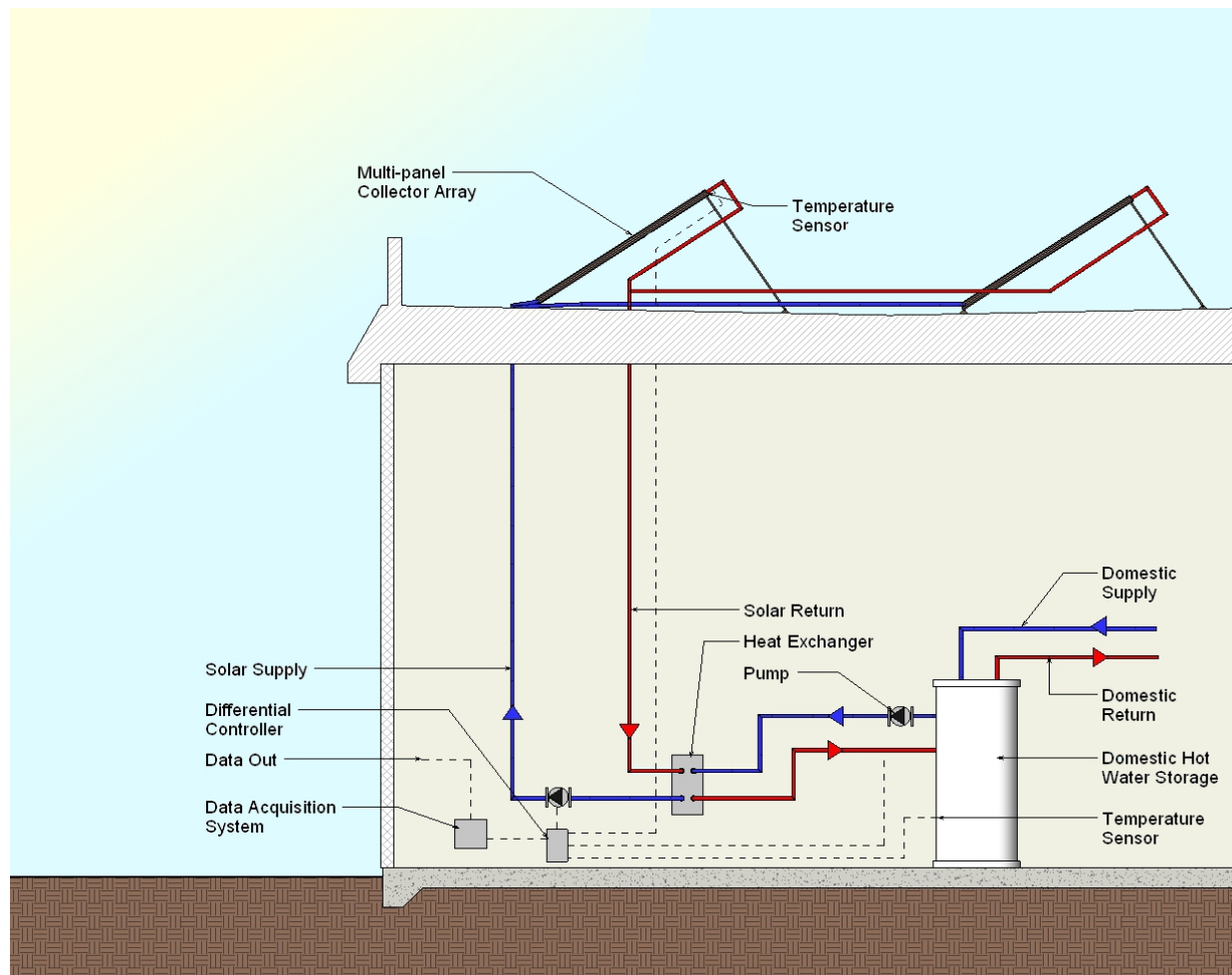




# Hot Water Panels



# How Solar Thermal Works





**Los Angeles, California Homes  
Circa 1910**







**Proximity Hotel, Greensboro, NC**  
**Solar Thermal: 100 panels**  
**Owner: Quantaince Weaver Hotels**





**Biltmore Park Hilton, Asheville, NC**  
**Solar Thermal: 72 panels**  
**Owner: Biltmore Farms**

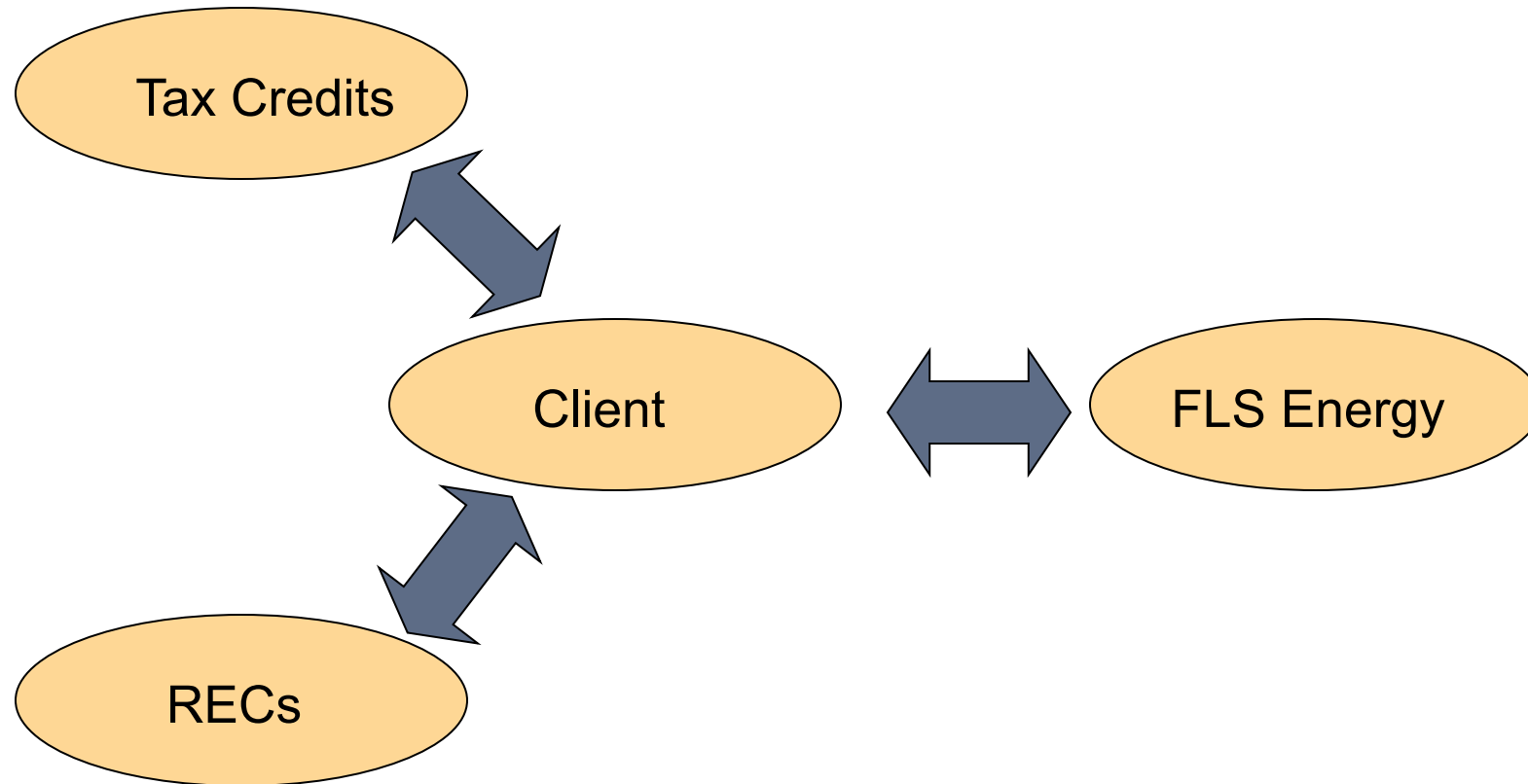






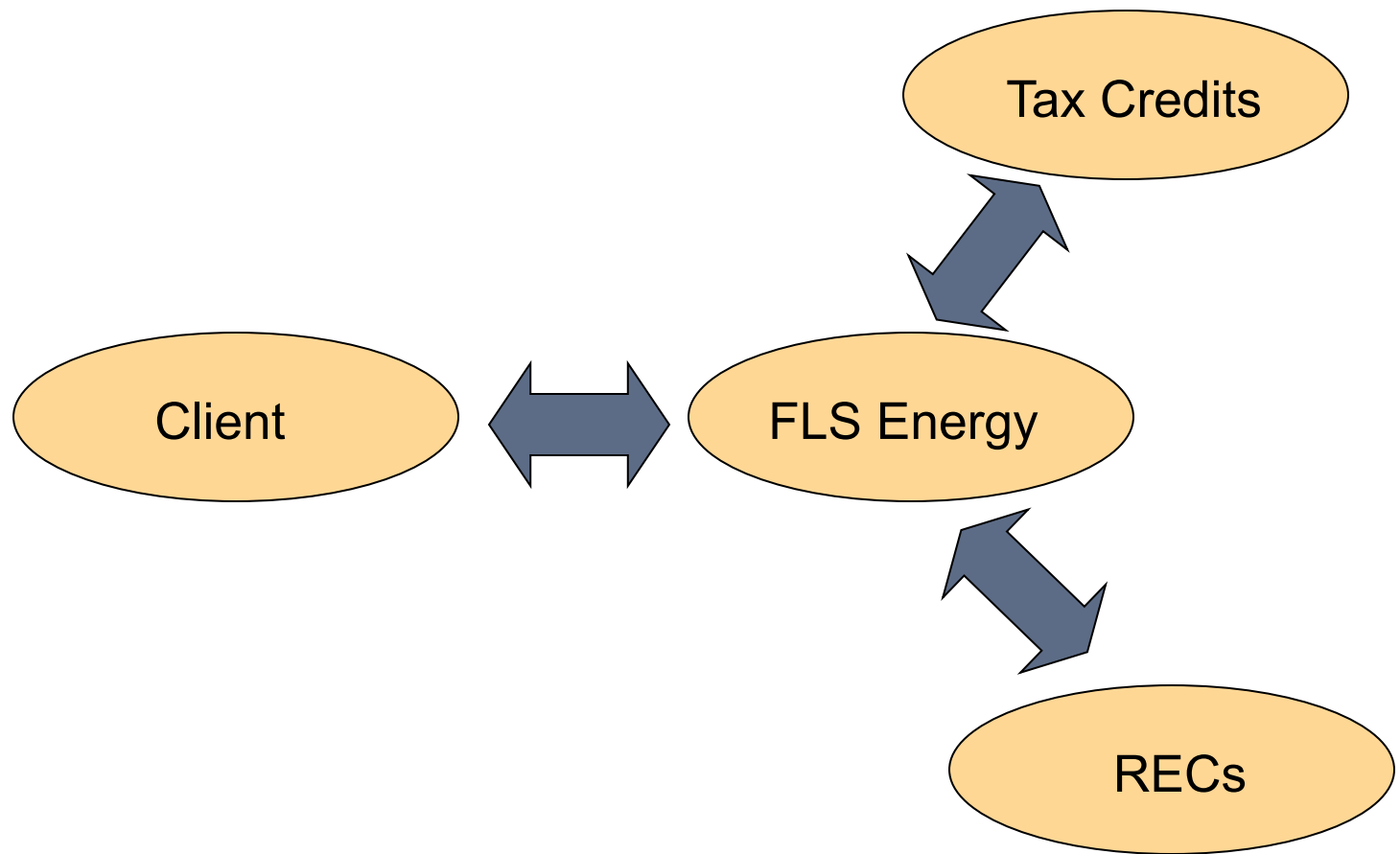
**Kanuga Conference Center**  
**Solar Thermal: 128 panels**  
**Owner: FLS Energy**

# Purchase Model

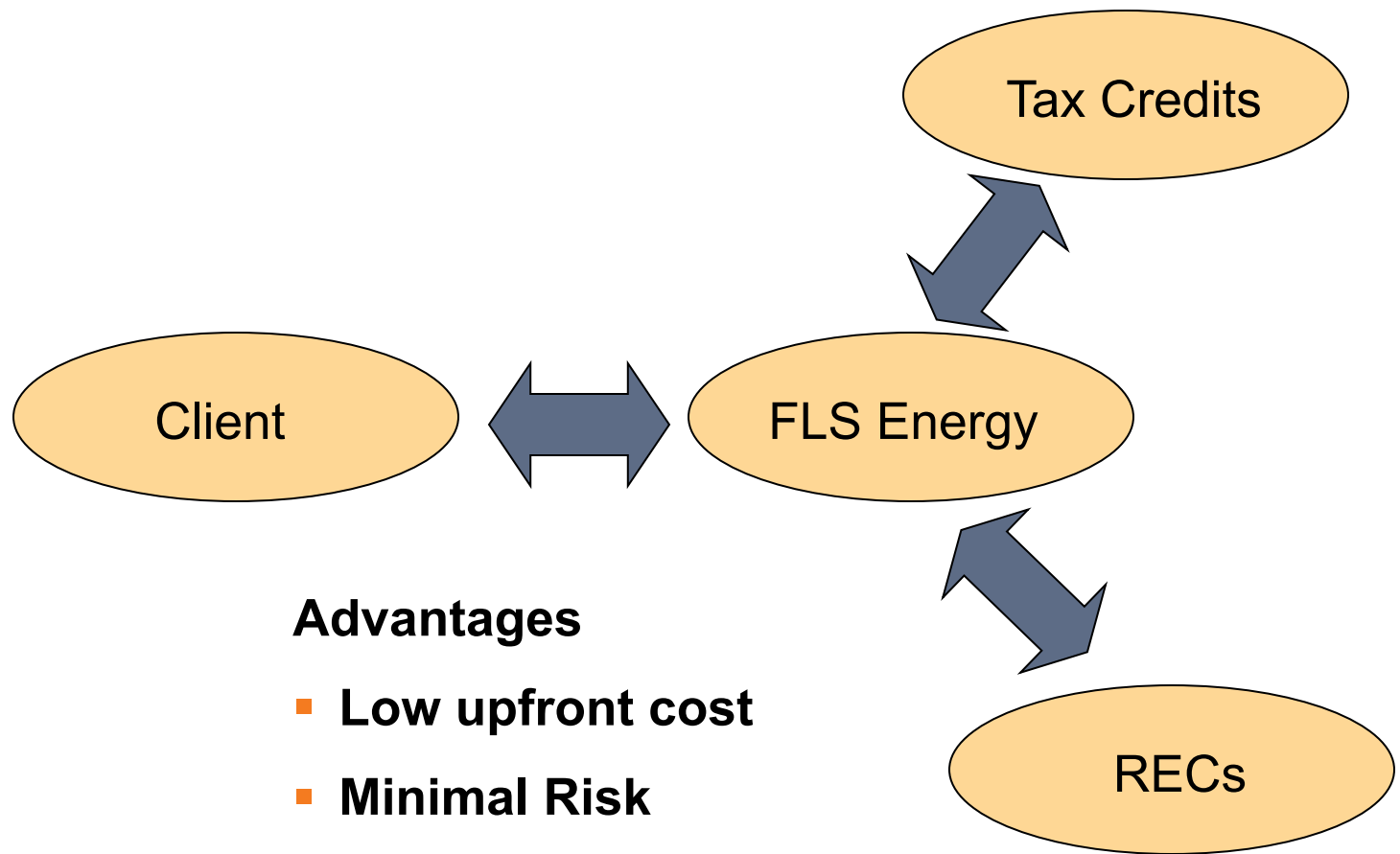




# Solar Energy Purchase Agreement (SEPA)



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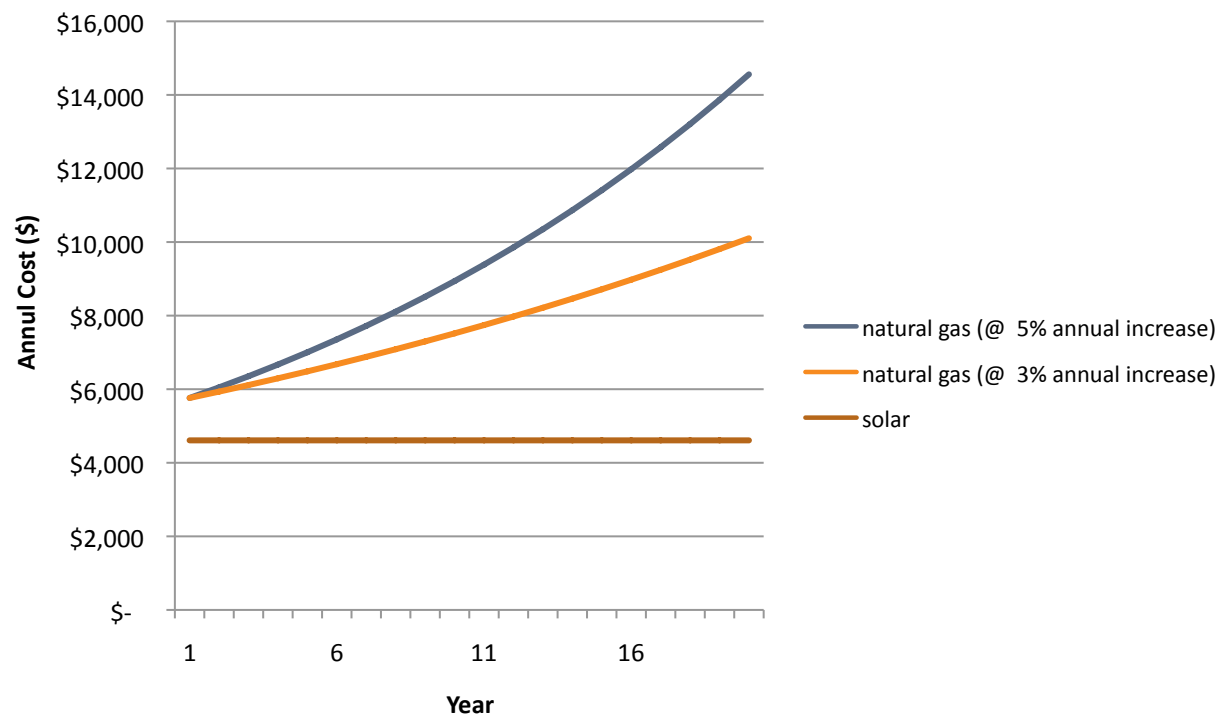


## Advantages

- Low upfront cost
- Minimal Risk
- Maintenance
- Fixing energy cost

## Savings of Solar vs Natural Gas

*Based on Given Amount of Hot Water*



# Monitoring and O&M

FLS Energy, Inc.

## Proximity Hotel — Greensboro , NC

**Last Reported** 1:26 PM Aug 19, 2008

**Generating** 13 kWth

**Flow Rate** 1,388.4 gal/hr

**Input Temp** 148°F

**Output Temp** 152°F



[Local Weather](#)

**Historical** [i](#)

[Today](#)

[Week](#)

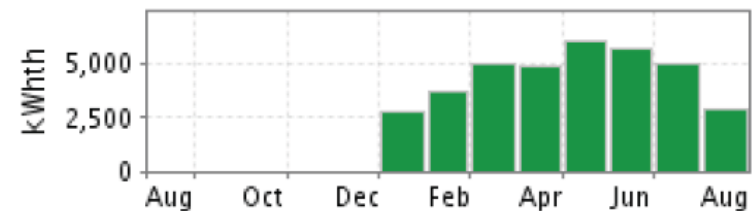
[Month](#)

[Year](#)

[Lifetime](#)

**Generated** 35,802 kWhth

**Total Volume** 2,435,000 gal



**Greenhouse Gases Avoided** Since Installation Jan 25, 2008 [i](#)

**CO<sub>2</sub>** 6,805 lbs.

Equivalent to:



The energy to power 109 homes for one day.

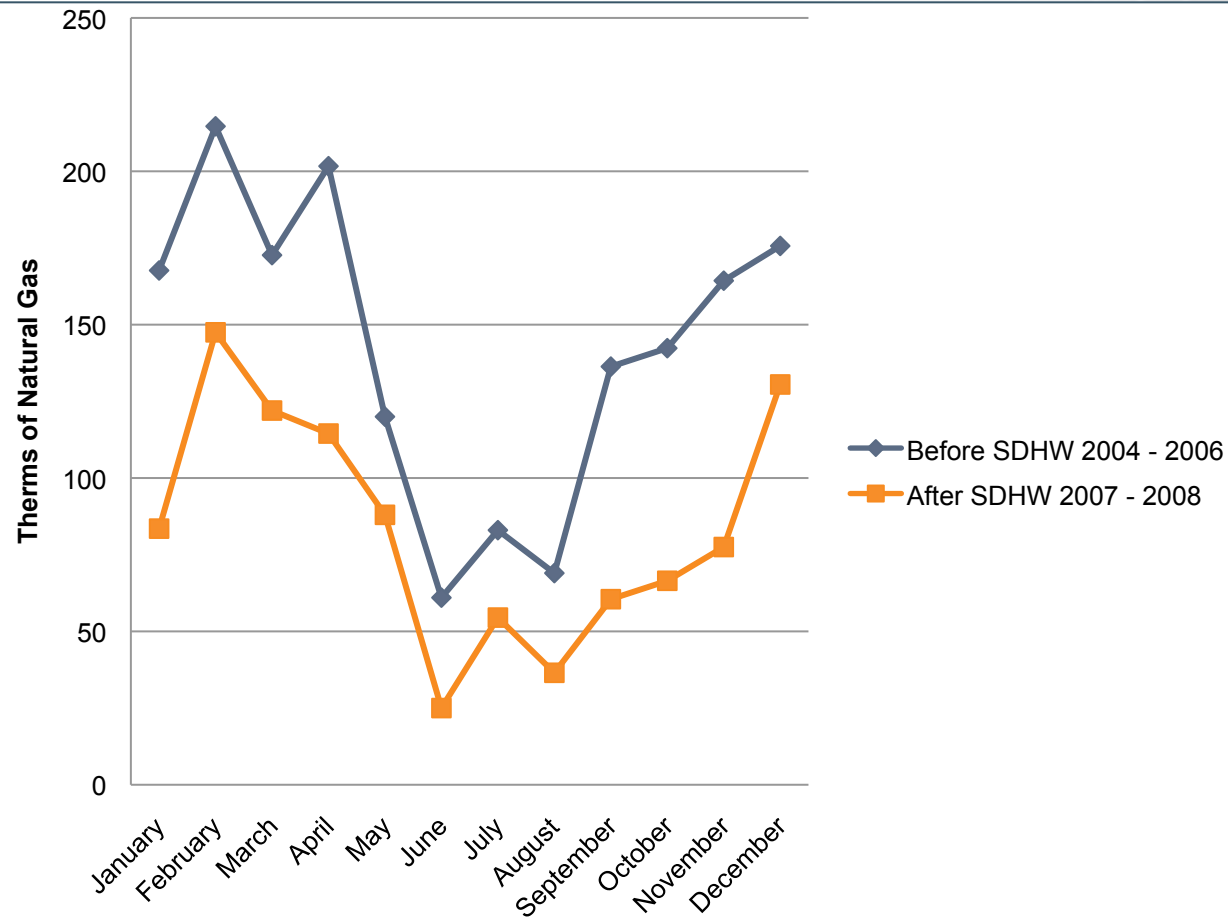


The pollution an average passenger car emits over 248 days.



**Guilford College**  
**Solar Thermal: 12 + 208 panels**  
**Owner: FLS Energy**

## Shore Hall, Guilford College







**Mars Hill College Dining Hall, Mars Hill, NC**  
**Solar Thermal: 48 panels**  
**Owner: FLS Energy**





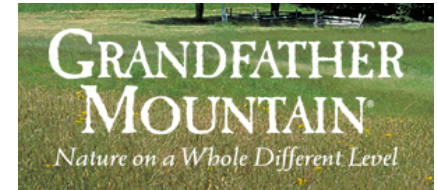
**Knox County Prison, TN**  
**Solar Thermal: 300 panels**  
**Owner: Knox County**



**Camp LeJeune**  
**Solar Thermal: 900 panels**  
**Owner: FLS Energy**



MegaWatt Solar



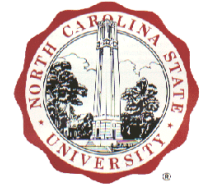
Hilton



ABTech



Greenbridge



Sustainable Strategies



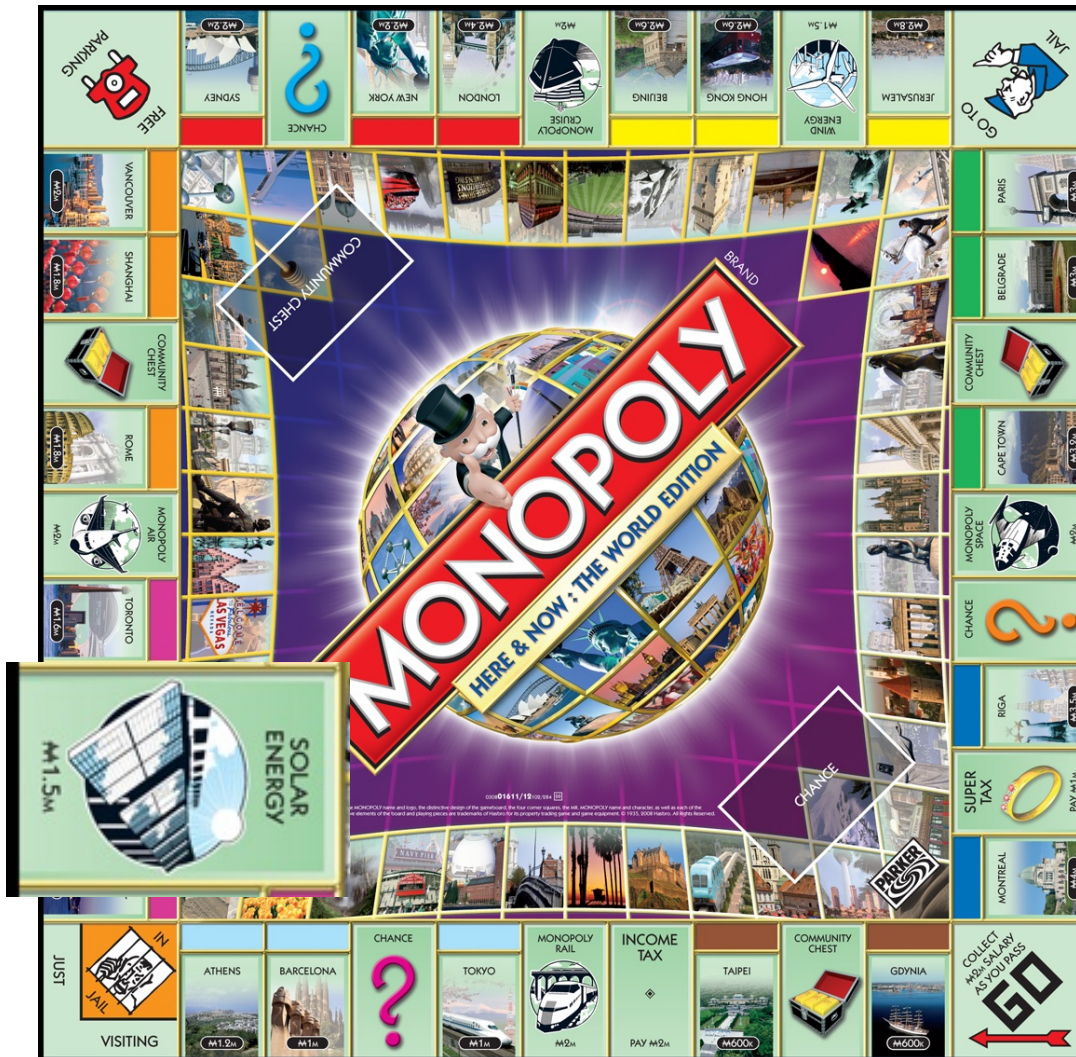
BIO-WHEELS



www.biowheels.com



# Making Solar Mainstream







# Our Team

## ■ Certifications

- Licensed General Contractor in NC, TN, SC, GA
- NABCEP Certifications
- Licensed P.E.
- Controller: CPA

## ■ Training

- SunPower Advanced PV Design
- SunPower Advanced PV Installation
- SEI Advanced Solar Design

## ■ Boards

- Governor's Energy Policy Council
- Progress Energy's Community advisory Council
- Duke Energy's Efficiency Task Force
- Department of Energy's Efficiency Work Group



# Committed to Making Solar Mainstream

**“We are way more than pleased with the good work that FLS Energy did for us.... they are trustworthy, competent and sincere.”**



Dennis Quaintance, Developer  
of the Proximity Hotel, 2008